2013/2014 Alberta Long-Term Care Resident Profile

June 2015

Alberta Government

Table of Contents

Introduction	3
Methodology	4
Demographic Profile	7
Health Profile	10
Care and Intervention	23
For Further Information	30

List of Figures

Figure 1: Age of Long-Term Care Residents at Mid-Fiscal Year	7
Figure 2: Gender Distribution	8
Figure 3: Highest Level of Education	9
Figure 4: Mental Health History	10
Figure 5: Top 10 Chronic Conditions	11
Figure 6: Memory/Recall Performance within the Environmental Setting	12
Figure 7: Pattern of Bladder and Bowel Continence Over the Last 14 Days	14
Figure 8: Location of Pain as Described (Based on Full Year Assessments)	15
Figure 9: Prevalence of Pressure and Stasis Ulcers	16
Figure 10: Number of Different Medications Received in the Past Seven Days	17

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List of Figures (continued)

Figure 11: Number of Days During the Past Seven Days the Long-Term Care Resident Received an Injection for Medication, Antigen or Vaccine	18
Figure 12: Resident's Ability to See Close Objects in Adequate Lighting	20
Figure 13: Long-Term Care Resident's Self-Performance in Activities of Daily Living	21
Figure 14: Frequency with which the Resident was Restrained by Devices and Restraints Over the Last Seven Days	24
Figure 15: Proportion of Residents with at Least One Day of Therapy in the Last Seven Days	25
Figure 16: Type of Nursing Rehabilitation/Restorative Care Received by Long-Term Care Residents	26
Figure 17: Number of Times the Long-Term Resident was Admitted to Hospital with an Overnight Stay in the Past 90 Days	27
Figure 18: Number of Times the Long-Term Care Resident Visited a Hospital Emergency Room but was not Admitted for an Overnight Stay in the Past 90 Days	28
Figure 19: Number of Days During the Last 14 Day Period a Physician has Examined the Long-Term Care Resident	28

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List of Tables

Table 1: Decision-Making Ability	13
Table 2: Hearing Ability	19
Table 3: 10 Most Common Activities Long-Term Care Residents Prefer to Participate In	22
Table 4: Nutritional Approach	23
Table 5: Intervention Programs for Mood, Behaviour and Cognitive Loss	29

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Definitions

Alberta Continuing Care Information System (ACCIS): A data repository in Alberta Health that validates and stores data on residents' characteristics from publicly funded long-term care facilities based on standardized assessment data.

Continuing care: Provides Albertans with the health care, personal care and accommodation services they need to support their independence and quality of life based on assessed need. This includes home care, supportive living and long-term care.

Episode of care: The time between the resident's admission into the long-term care facility until discharge.

Full assessment: A Resident Assessment Instrument-Minimum Data Set 2.0 (RAI-MDS 2.0) assessment completed within two weeks of entry to a long-term care facility or on the anniversary of the previous full assessment. If a full assessment is done after a significant change in a resident's health status, this full assessment becomes the new anniversary date.

interRAI: An international collaboration that develops tools to collect data on characteristics and outcomes of individuals who obtain health and social services. This includes the RAI-MDS 2.0 that is used to assess long-term care residents in Alberta.

Long-term care: A facility-based living environment with 24/7 nursing support for individuals with complex needs who are unable to remain at home or in a supportive living setting. In Alberta, these are nursing homes and auxiliary hospitals.

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Definitions

Maintenance resident: A resident with chronic health conditions and/or unstable living conditions who requires the support of professional health services delivered in a long-term care facility.

Physical function: Includes activities such as the ability to transfer from the bed to a chair, use the toilet, eat, and manage personal hygiene needs.

Private pay resident: A resident with chronic health conditions and/or unstable living conditions who requires the support of professional health services delivered in a long-term care facility, and who exclusively pays all costs associated with care services and accommodations.

Quarterly assessment: A RAI-MDS 2.0 assessment done within 92 days of either the last quarterly or full assessment (whichever comes first).

Resident: Any person who resides in a long-term care facility.

Short-stay resident: A resident who resides in long-term care for 28 days or less.

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Introduction

This report presents the profile of long-term care (LTC) residents in Alberta for the 2013/2014 fiscal year (April 1, 2013 to March 31, 2014). Assessment data were submitted on behalf of long-term care facilities to the Alberta Continuing Care Information System (ACCIS). This is the third long-term care resident profile developed in Alberta using the ACCIS data. The 2011/2012 Alberta Long-Term Care Resident Profile was the first.

Background

In 2003/2004, ACCIS was developed as a way to gather accurate, meaningful and timely information about continuing care clients. ACCIS is a valuable tool to support provincial and health system accountability measures and quality improvement initiatives. ACCIS uses a standardized data set developed by interRAI consisting of the RAI-MDS 2.0 assessment instrument for use in long-term care facilities.

The ACCIS database receives, validates and stores data from publicly funded long-term care facilities. The data are also submitted to the Canadian Institute for Health Information (CIHI).

The RAI-MDS 2.0:

- Gathers information on residents' strengths and needs
- Enables the tracking of changes in health status
- Uses an interdisciplinary approach
- Promotes quality of care and quality of life

This profile presents a snapshot of the long-term care population in Alberta during the fiscal year 2013/2014.

Objective

The objective of the profile is to describe the population that resides in long-term care in Alberta during a specified period of time. This includes identifying the social, demographic, physical and behavioral characteristics of long-term care residents.

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Methodology

In the ACCIS database, an episode of care is defined as the time between the resident's admission into the long-term care facility and discharge. Within that episode, the resident will have a full assessment within 14 days of admission and an assessment every quarter (92 days) thereafter.

A total of 19,642 unique residents (maintenance, short-stay and private pay) who received services from long-term care facilities during the 2013/2014 fiscal year were initially identified to be included in this profile. Long-term care residents are assessed using the full RAI-MDS 2.0 tool within 14 days of admission to gain a comprehensive understanding of the resident's health status and care needs. During the year, residents also receive three quarterly assessments which provide ongoing monitoring of the resident's needs between comprehensive full assessments. Of the 19,642 unique residents, 539 did not have a full or quarterly assessment completed (this could be for a variety of reasons including residents being discharged before 14 days of admission). This reduced the total number of residents described in the *2013/2014 Alberta Long-Term Care Resident Profile* to 19,103.

For ease of readability and simplicity, percentages within this report are rounded to the nearest whole number. Accordingly, some percentages may total more than 100%.

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Methodology

Inclusion and Exclusion

This report included any resident who received a full or quarterly assessment in a long-term care facility in Alberta at any point during the 2013/2014 fiscal year. Private pay, short-stay and maintenance residents were combined. Residents who were admitted and did not have a completed full or quarterly assessment were excluded as the minimal available information on these residents could have skewed the analysis.

Assessments Included in Report

If a resident had more than one full assessment in the fiscal year, the most recent full assessment was used.

If a resident had only quarterly assessments (no full assessment), the most recent quarterly assessment was used (some residents may not have a full assessment in a particular fiscal year as they are discharged before reaching their admission anniversary date; however, they may still have a quarterly assessment as it is required every 92 days).

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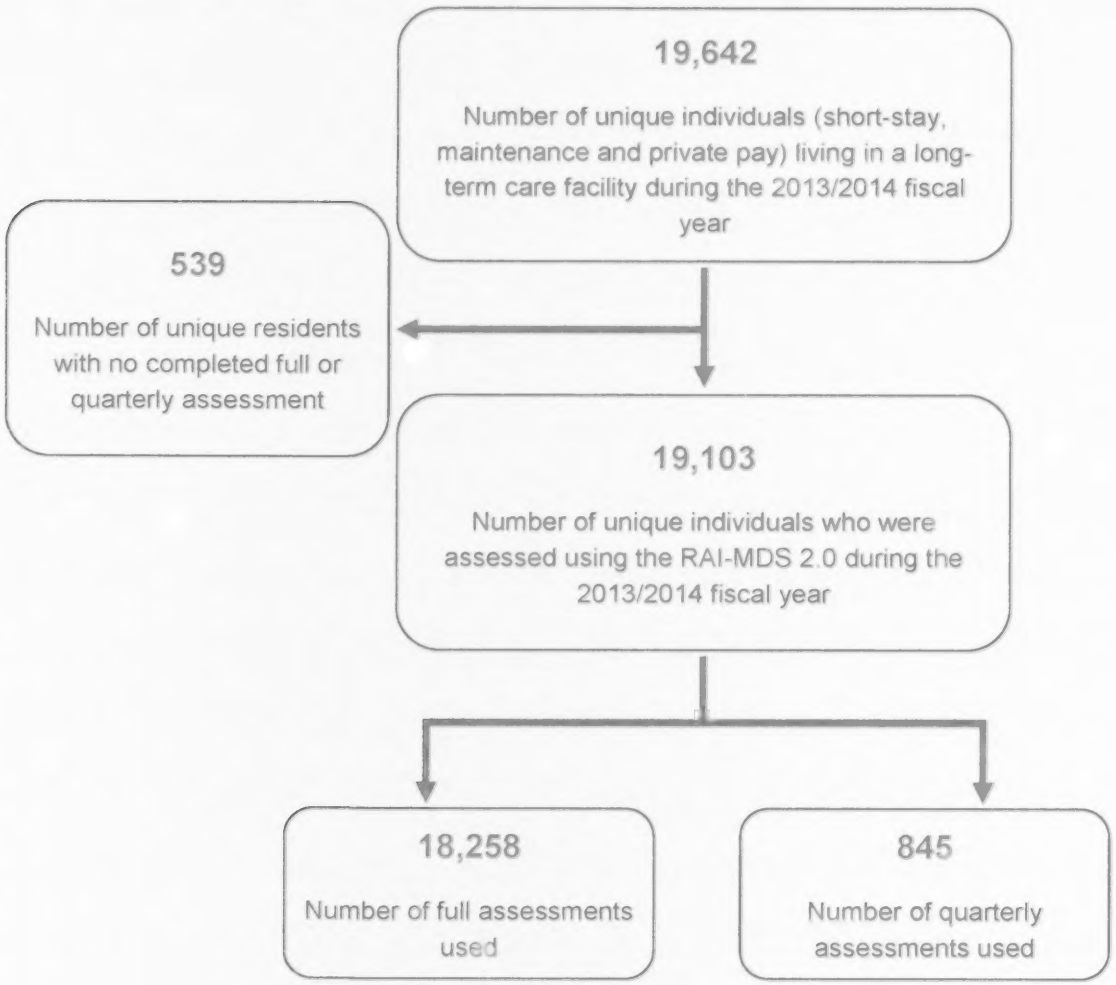
Assessments Used for Report


19,642
Number of unique individuals (short-stay, maintenance and private pay) living in a long-term care facility during the 2013/2014 fiscal year
539
Number of unique residents with no completed full or quarterly assessment
19,103
Number of unique individuals who were assessed using the RAI-MDS 2.0 during the 2013/2014 fiscal year
18,258
Number of full assessments used
845
Number of quarterly assessments used

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Demographic Profile

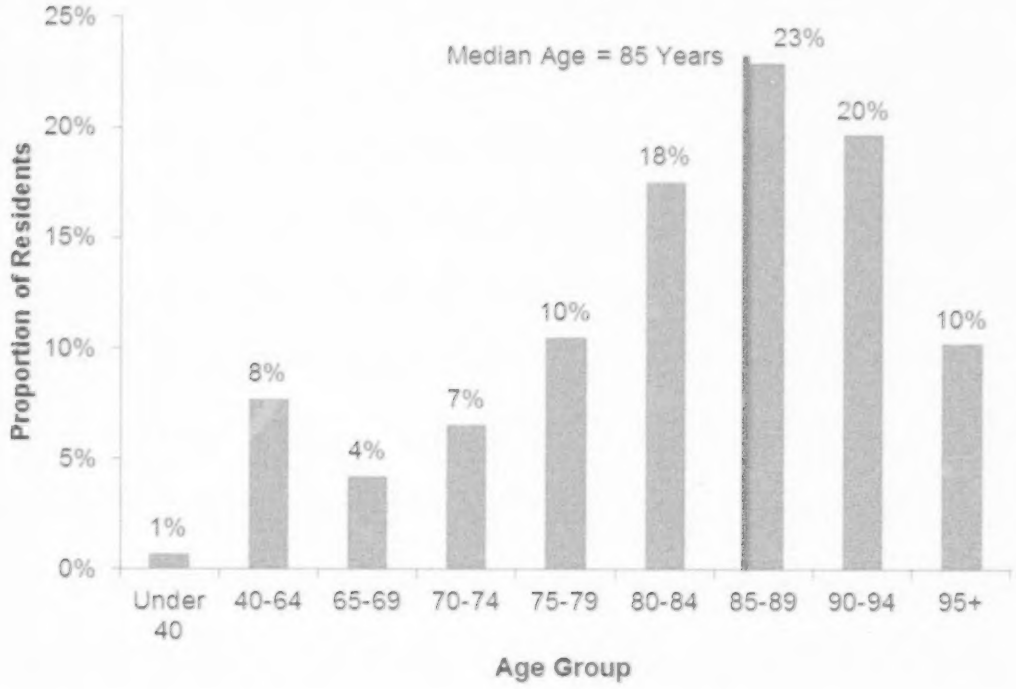
This section of the report provides a brief description of the demographic profile of long-term care residents in Alberta during the 2013/2014 fiscal year. This includes **age**, **gender**, **primary language** and **education level**.

Age

Age at mid-fiscal year ranged from 12 to 111 years with an average age of 82.6 years:

- 92% of residents were 65 years of age or older
- 81% were 75 years of age or older
- 53% were 85 years of age or older
- 9% of residents were under 65 years of age

Figure 1: Age of Long-Term Care Residents at Mid-Fiscal Year



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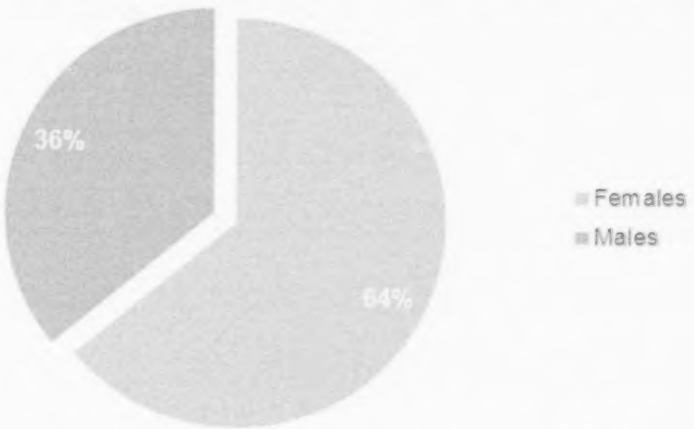
Gender

Sixty-four per cent (64%) of long-term care residents in Alberta were female.

Figure 2: Gender Distribution



Primary Language

There were a total of 111 different languages recorded among long-term care residents. The most common language primarily spoken or understood by long-term care residents was English (89%).

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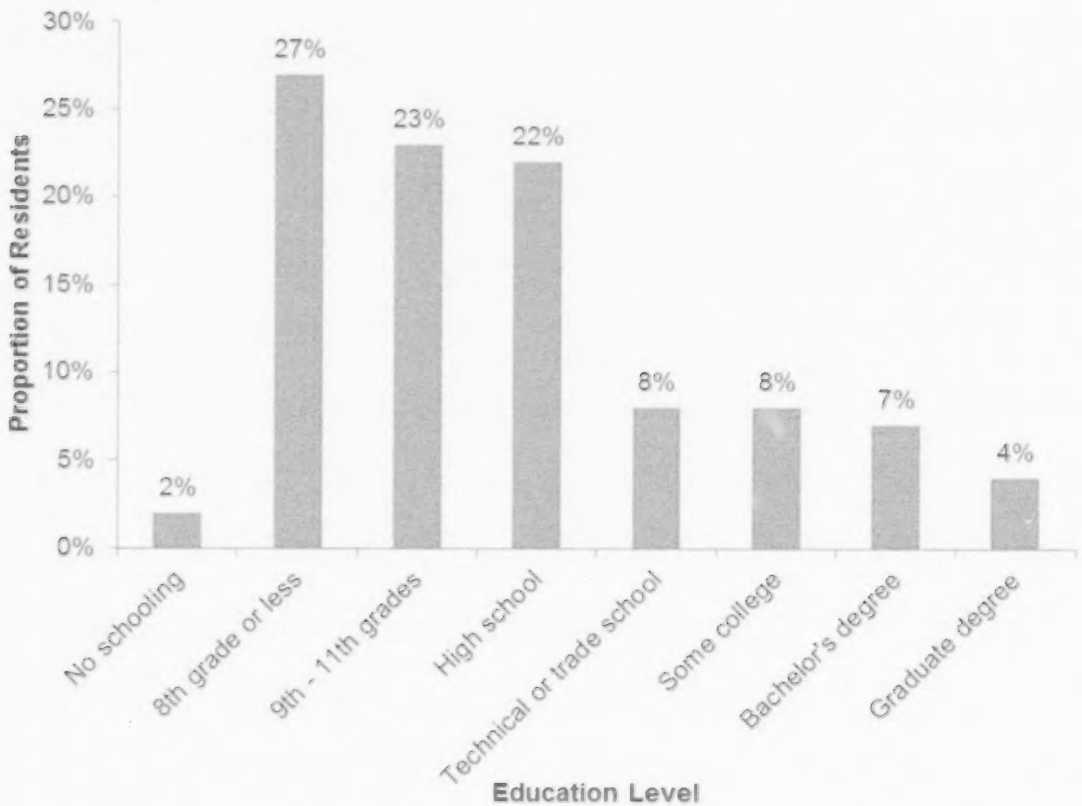
Education Level

The highest level of education long-term care residents attained varied from "no schooling" to a "graduate degree." Approximately half of all long-term care residents (49%) had a high school education or higher.

Figure 3: Highest Level of Education*



**28% of long-term care residents were recorded as "unknown" for this element and therefore not included in Figure 3.*

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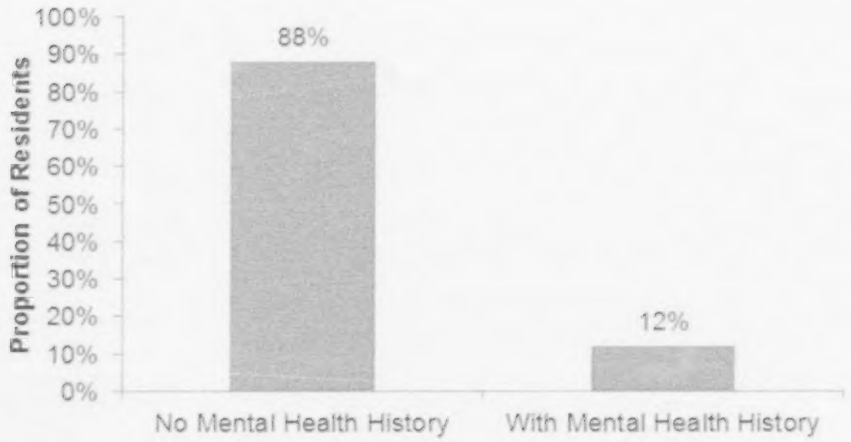
This section describes the health status of long-term care residents in Alberta during the 2013/2014 fiscal year.

Mental Health History

The majority (88%) of long-term care residents did **not** have a primary or secondary diagnosis of psychiatric illness* or developmental disability.

Figure 4: Mental Health History



**Psychiatric illness is defined as the resident having a schizophrenic, mood, paranoid, panic or other severe anxiety disorder; somatoform disorder, personality disorder, other psychotic disorder; or another mental disorder that may lead to chronic disability; but not a primary diagnosis of dementia, including Alzheimer's disease.*

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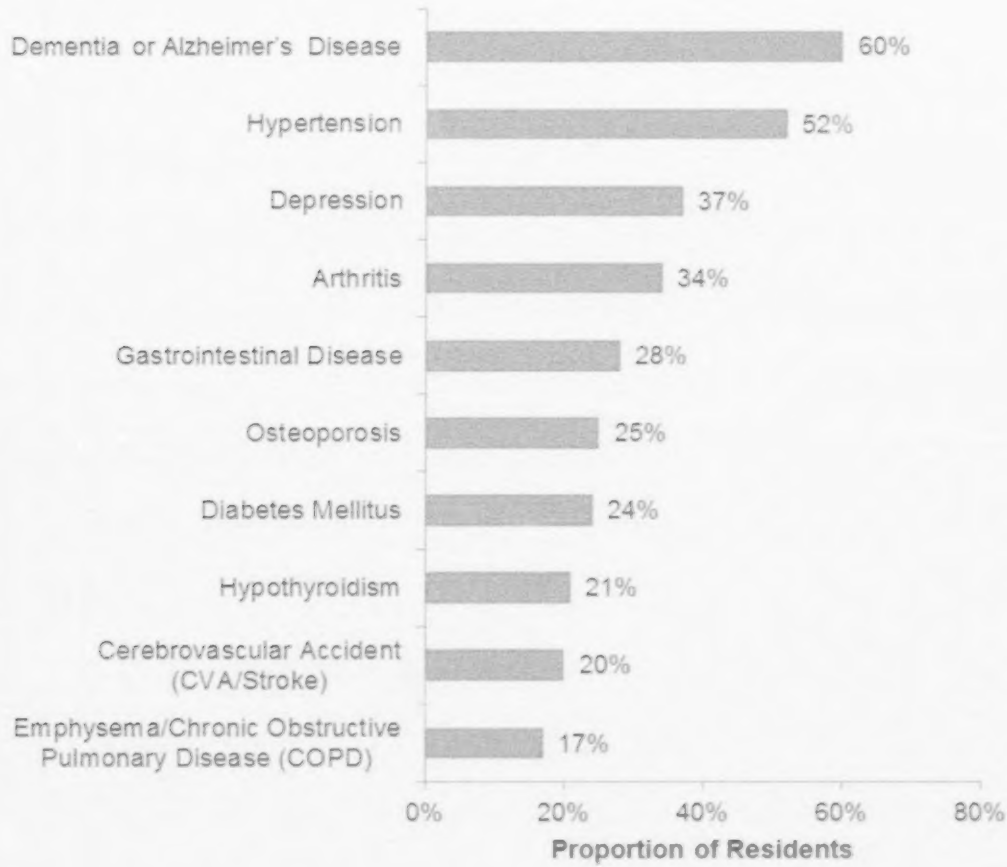
Chronic Disease

The most commonly diagnosed chronic condition among long-term care residents was dementia or Alzheimer's disease. The diagnosis of dementia or Alzheimer's was identified in 60% of all long-term care residents.

Other common chronic conditions identified in long-term care residents include: hypertension (52%), depression (37%), arthritis (34%), gastrointestinal disease (28%), osteoporosis (25%), and diabetes mellitus (24%).

Figure 5: Top 10 Chronic Conditions



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Memory/Cognitive Performance

Both short-term and long-term memory loss were common among long-term care residents, indicating that the majority of residents had difficulty recalling both recent (e.g., what was for breakfast) and long-past events (e.g., where did the resident live prior to long-term care) *(observation period: last seven days prior to assessment).*

- 78% of residents had short-term memory loss
- 66% of residents had long-term memory loss

Figure 6 illustrates the memory/recall performance of long-term care residents within their environmental setting. This provides staff with a better understanding of the resident's memory and recall performance beyond initial impression.

- 58% of residents knew they were in a facility
- 56% of residents knew the location of their own room
- 49% of residents knew the names and faces of staff
- 38% of residents knew the current season

Figure 6: Memory/Recall Performance within the Environmental Setting

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Decision-Making Ability

A further measure of cognitive functioning included in ACCIS is the *Cognitive Performance Scale*. This scale looks at memory, decision-making, communication and eating.

In the 2013/2014 fiscal year, 25% of long-term care residents had severe cognitive impairment and 43% had mild to moderate cognitive impairment.

A small percentage of long-term care residents (8%) were identified as being able to make daily decisions independently (e.g., choosing items of clothing, attending scheduled meals, and understanding their own strengths and limitations).

Nearly one-quarter (23%) were classified as having modified independence (resident was able to make safe decisions in familiar situations, but experienced some difficulty in new situations in their decision-making ability). The majority (68%) were identified as being moderately or severely impaired in making decisions* *(observation period: last seven days prior to assessment)*.

Table 1: Decision-Making Ability

Ability to Make Decisions	Proportion of Residents
No recorded level	<1%
Independent	8%
Modified independence	23%
Moderately to severely impaired *	68%

**In the RAI-MDS 2.0, moderately impaired and severely impaired are two different variables. For the purpose of this report, the two levels of daily decision-making impairment were combined.*

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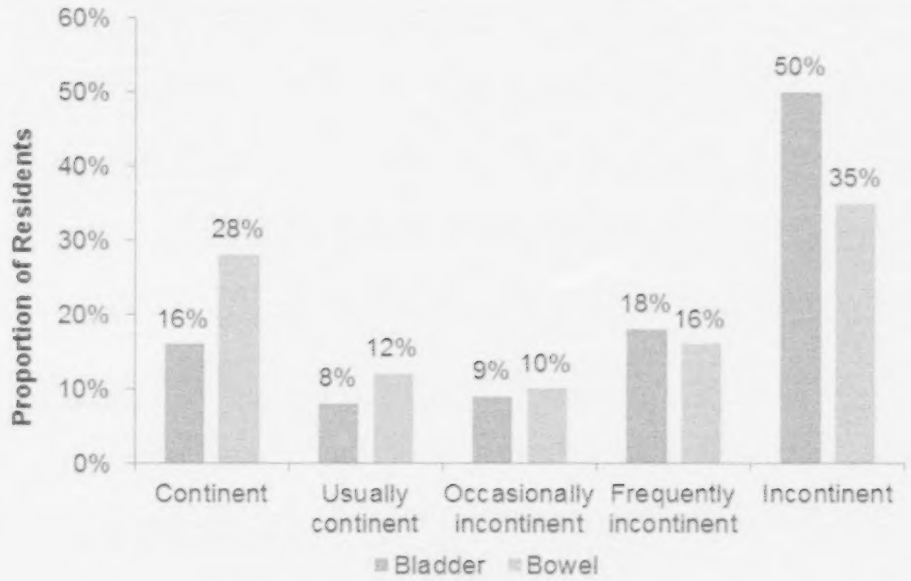
Bowel and Bladder Continence

The pattern of bladder continence in 24% of long-term care residents was either continent or usually continent. In 77% of residents, the pattern of bladder continence ranged from occasionally incontinent to completely incontinent, and 9% had an indwelling catheter.

The pattern of bowel continence in 40% of residents was either continent or usually continent, while in 61% the pattern ranged from occasionally incontinent to completely incontinent.

Figure 7: Pattern of Bladder and Bowel Continence Over the Last 14 Days



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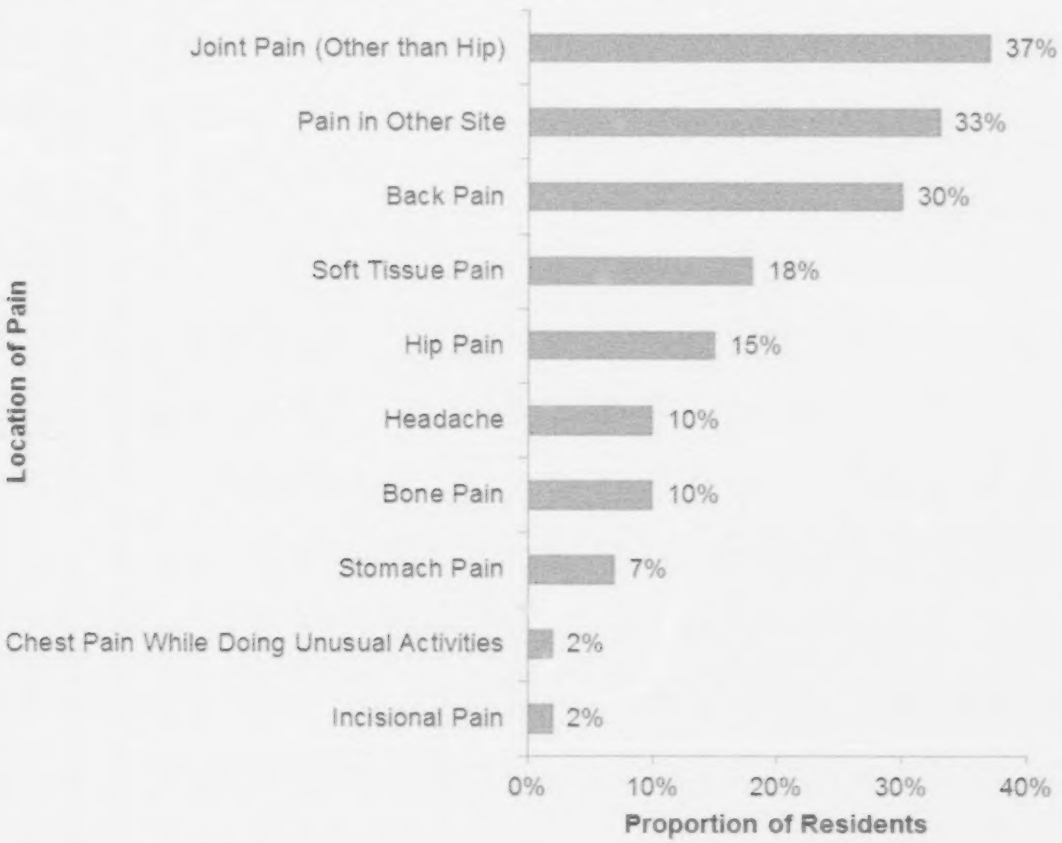
Pain

On the RAI-MDS 2.0, pain is defined as physical pain or discomfort in any part of the body.

Forty-four per cent (44%) of long-term care residents experienced some sort of pain on a daily or less than daily basis. Of the residents that experienced some sort of pain, 92% experienced pain of a mild or moderate nature.

For a small proportion (8%) of long-term care residents, the pain was severe enough to disrupt social occasions, sleep and daily activities. The most frequent pain sites identified were joints (other than the hip) and pain in other sites (e.g., general aches and pains).

Figure 8: Location of Pain as Described (Based on Full-Year Assessments)



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Ulcers

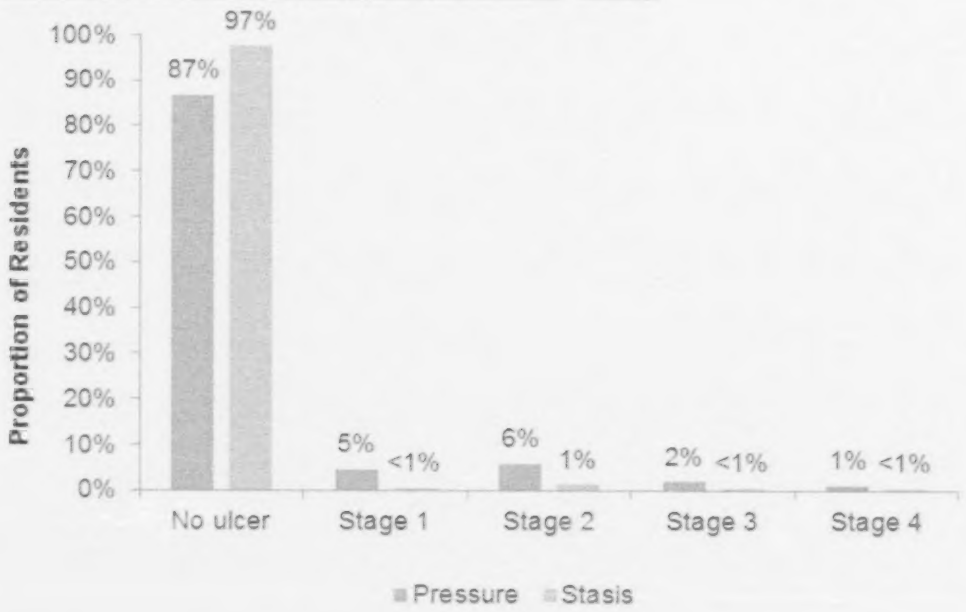
Pressure ulcers are a breakdown of the skin (sometimes deep) resulting from pressure over time. Stasis ulcers are a breakdown of the skin (typically shallow), resulting from poor blood circulation. Pressure ulcers (14%) were more prevalent than stasis ulcers (3%) *(observation period: last seven days prior to assessment)*.

There are four stages of skin ulcers:

- Stage 1: A persistent area of skin redness without a break in the skin
- Stage 2: A partial thickness loss of skin layers that presents clinically as an abrasion, blister or shallow crater
- Stage 3: A full thickness of skin is lost, exposing the subcutaneous tissue
- Stage 4: A full thickness of skin and subcutaneous tissue is lost, exposing muscle or bone

The majority of residents did not have any skin ulcers.

Figure 9: Prevalence of Pressure and Stasis Ulcers



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Accidents (Falls)

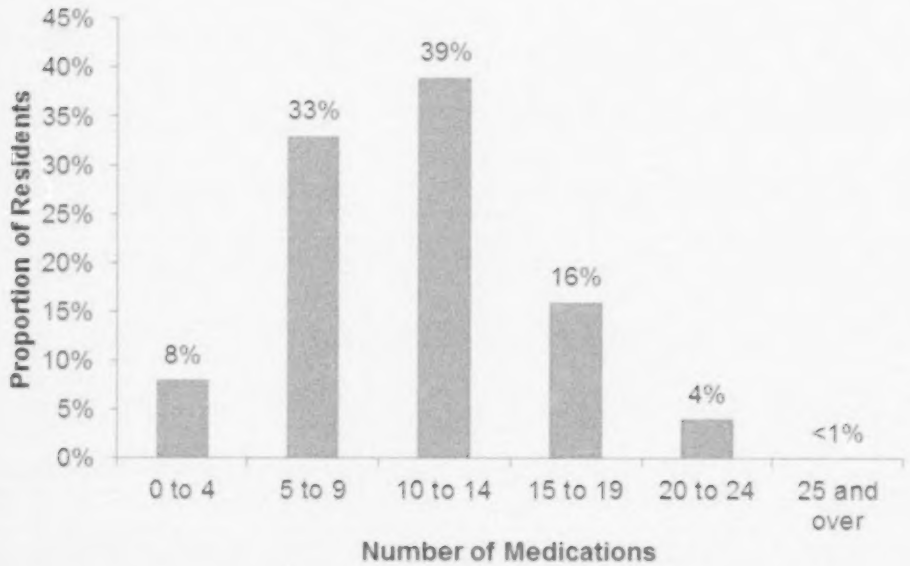
The RAI-MDS 2.0 has an element for accidents (falls or fractures). This provides information on the potential likelihood of the resident's risk of future falls or injuries.

- 27% of long-term care residents fell in the past six months
- 18% of long-term care residents fell in the past month
- 3% of long-term care residents experienced a hip fracture in the past six months
- 2% of long-term care residents experienced a fracture other than of the hip in the past six months

Medications Used and Injections in the Past Seven Days

Almost all long-term care residents (99.6%) received one or more different medications in the past seven days. Less than 1% received more than 25 different medications in the past seven days. On average, long-term care residents in Alberta received 11 different medications in the past seven days at the time of assessment.

Figure 10: Number of Different Medications Received in the Past Seven Days



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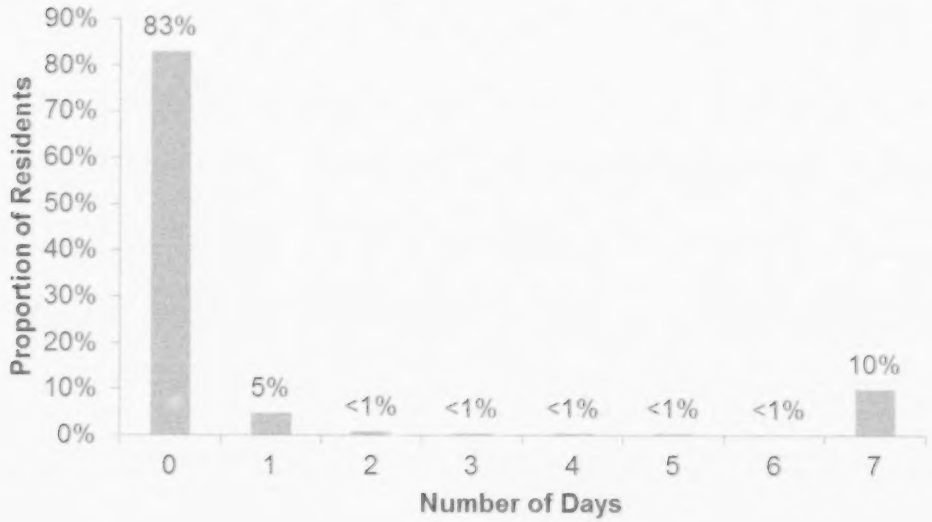
Most residents (83%) did not receive injections. Seventeen per cent (17%) had an injection in the past seven days.

Figure 11: Number of Days During the Past Seven Days the Long-Term Care Resident Received an Injection for Medication, Antigen or Vaccine



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Communication, Hearing & Vision

Different methods of communication are used by residents to make their needs or wishes known. The two most common methods for communicating among long-term care residents were through direct speech, and/or through signs, gestures or sounds. The majority (94%) of residents used speech as their mode of expression; however, only 73% of all residents had clear speech. Twenty per cent (20%) used signs, gestures or sounds to communicate.

Many long-term care residents also experience difficulty understanding others, whether through speech, writing, sign language or Braille. This element captures the resident's ability to hear, process and comprehend messages from others. Seventy-one per cent (71%) of residents were able to understand or usually understand others while 29% could sometimes or rarely/never understand others.

Ten per cent (10%) of long-term care residents used a hearing aid on a regular basis, and 5% had a hearing aid but did not use it regularly *(observation period: last seven days prior to assessment)*.

Table 2: Hearing Ability

Hearing Ability	Proportion of Residents
Hear adequately	54%
Hear with minimal difficulty	30%
Can only hear in special situations or highly impaired	16%

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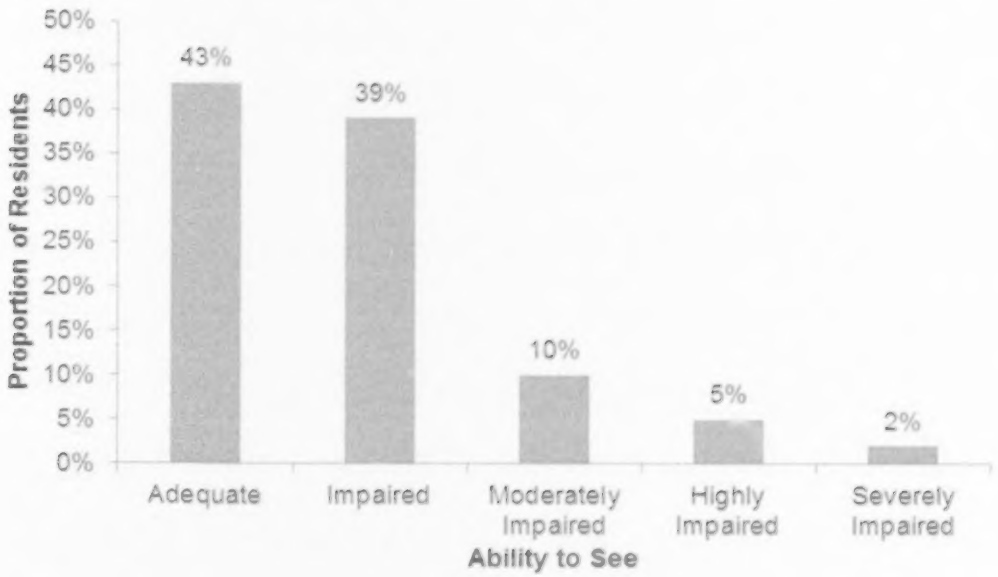
The RAI-MDS 2.0 contains an element that measures the ability of long-term care residents to see close objects in adequate lighting, using the resident's customary visual appliance. Sixty-four per cent (64%) of residents used a visual appliance. Over half (56%) of long-term care residents had a visual impairment *(observation period: last seven days prior to assessment)*.

Figure 12: Long-Term Care Resident's Ability to See Close Objects in Adequate Lighting



Oral and Nutritional Status

Thirty-seven per cent (37%) of long-term care residents had chewing problems. Twenty-nine per cent (29%) of residents had problems associated with swallowing. Thirty-six per cent (36%) leave a quarter or more of their food uneaten at most meals.

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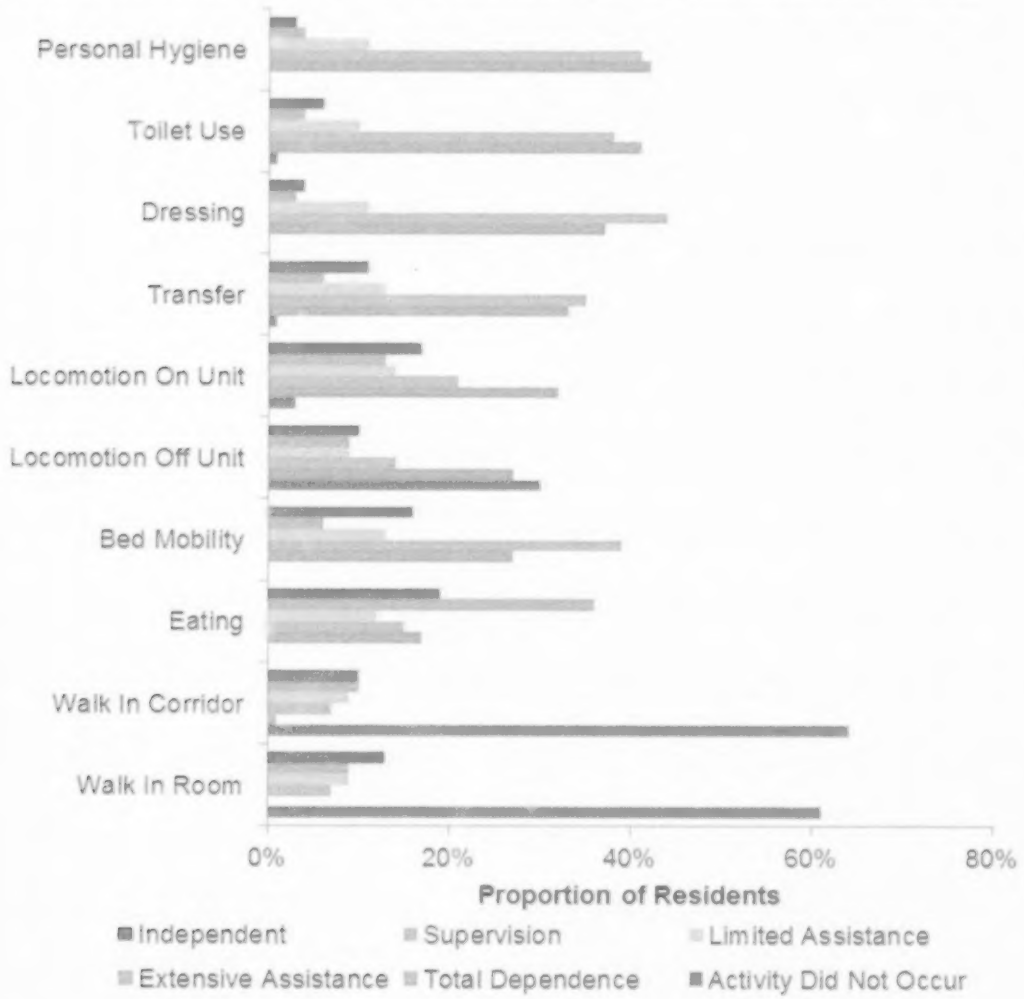
Activities of Daily Living (ADL)

A long-term care resident's ability to perform activities of daily living (ADL) is one indicator of their physical functioning. Physical function includes ADLs such as the ability to transfer from the bed to a chair, to use the toilet, to feed oneself, and to manage personal hygiene needs.

The three activities with the highest proportion of independence for long-term care residents were eating (19%), locomotion on the unit (17%) and bed mobility (16%). The three activities with the highest proportion of dependency were personal hygiene (42%), toilet use (41%) and dressing (37%).

Figure 13: Long-Term Care Resident's Self-Performance in Activities of Daily Living



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Participation in Activities

Music and talking or conversing were the two most common activities long-term care residents preferred to participate in *(observation period: last seven days prior to assessment)*.

Table 3: 10 Most Common Activities Long-Term Care Residents Prefer to Participate In

Rank	Activity	Proportion of Residents
1	Music	71%
2	Talking or Conversing	68%
3	Watching TV	55%
4	Walking/Wheeling Outdoors	34%
5	Exercise/Sports	32%
6	Cards/Other Games	30%
7	Spiritual/Religious Activities	26%
8	Reading/Writing	26%
9	Trips/Shopping	22%
10	Crafts/Arts	18%

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Care and Intervention

This section describes common care and intervention strategies for long-term care residents in Alberta during the 2013/2014 fiscal year.

Nutrition Approaches

Thirty-five per cent (35%) of residents had their meals mechanically altered in which the consistency of the food is changed to assist in oral intake (e.g., pureed food, ground meat and soft solids).

Thirty-two per cent (32%) used dietary supplements, such as protein shakes, between meals.

Table 4: Nutritional Approach

Approach	Proportion of Residents
Mechanically altered diet	35%
Dietary supplement between meals	32%
Therapeutic diet	28%
On a planned weight change program	12%
Specialized, altered, or adaptive equipment	6%
Parenteral/intravenous	3%
Feeding tube	2%
Syringe (oral feeding)	<1%

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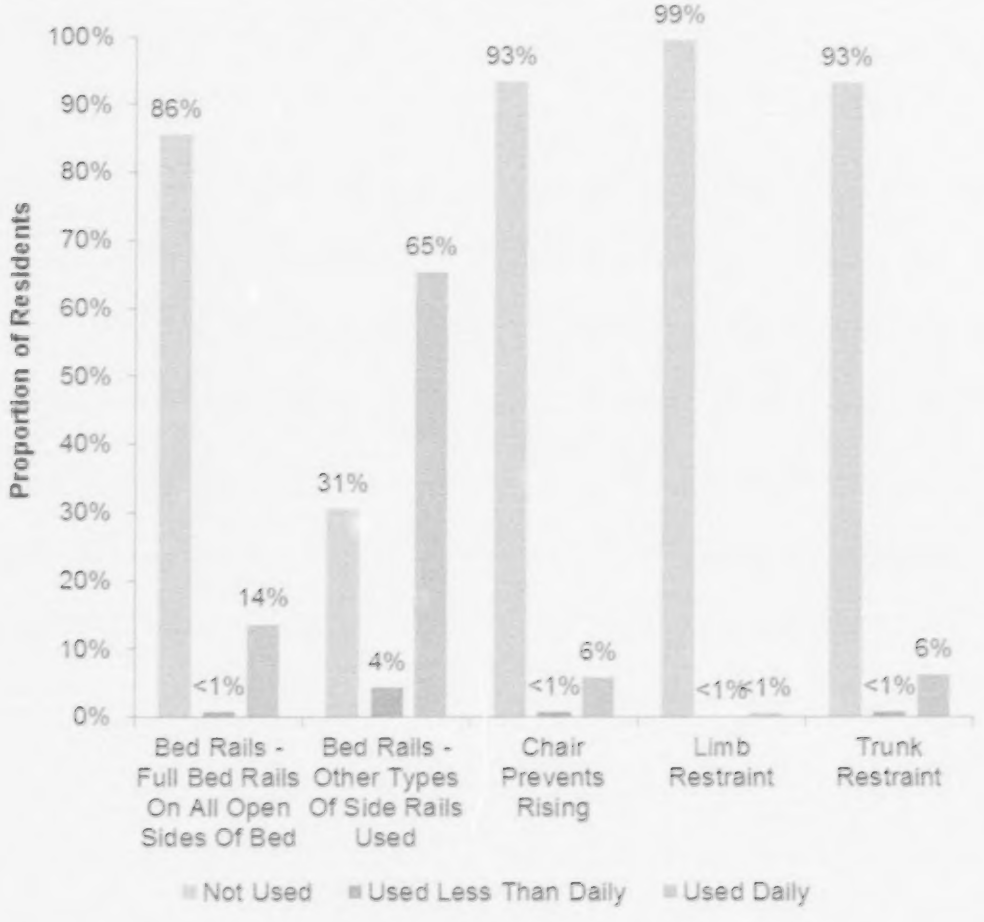
Devices and Physical Restraints

Among long-term care residents, partial bed rails, such as half rails or rails on one side, were the most frequently used device to physically restrain residents at any time during the day or night. Limb restraints were the least frequently used device for restraining residents.

Figure 14: Frequency with which the Resident was Restrained by Devices and Restraints Over the Last Seven Days



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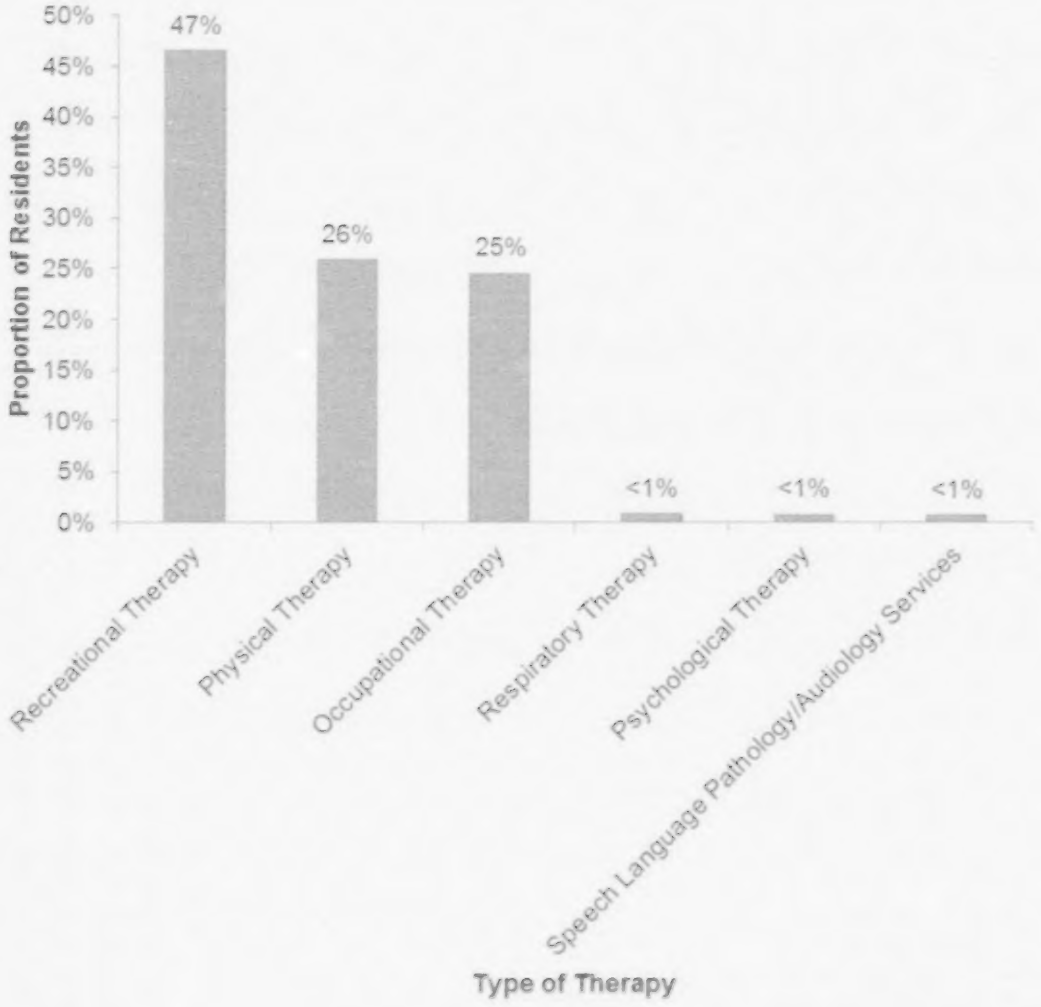
Therapy

The RAI-MDS 2.0 assessment definition states that to be included, therapies must have occurred after admission into the facility, be ordered by a physician (if applicable), and be performed by a qualified therapist or, in some instances, under the direct supervision of a qualified therapist. Figure 15 below describes the proportion of residents that received therapies in the past seven days.

Figure 15: Proportion of Residents with at Least One Day of Therapy in the Last Seven Days



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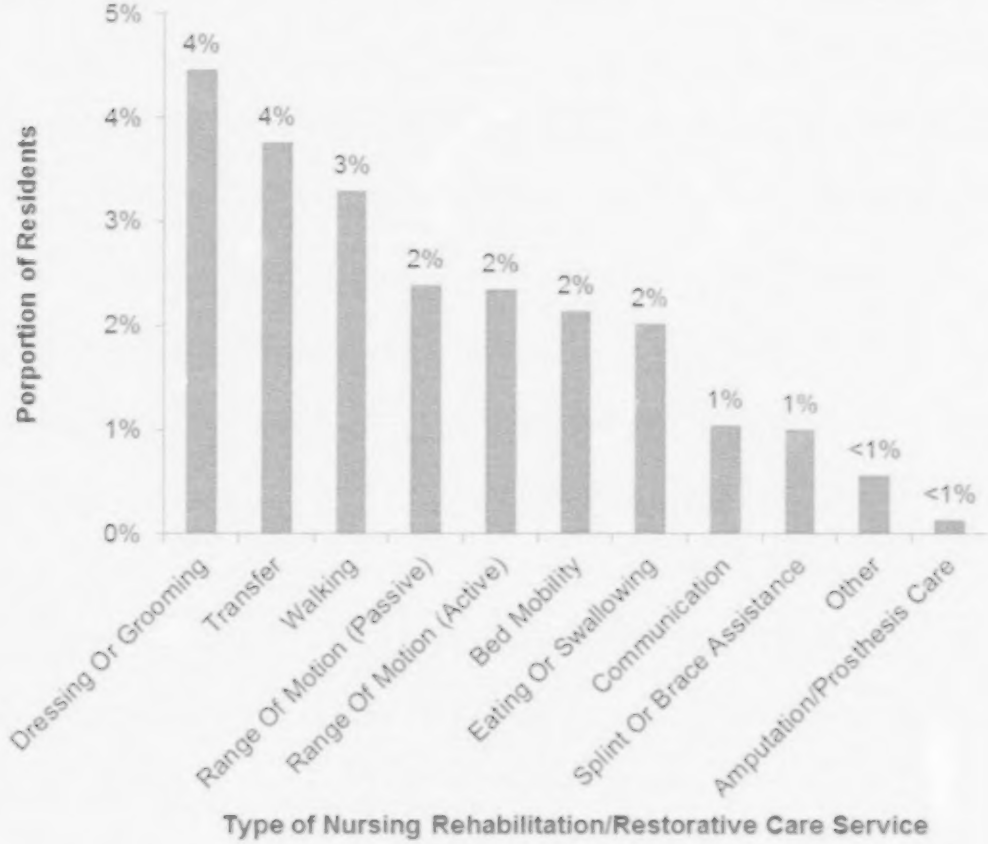
Nursing Rehabilitation/Restorative Care

Nursing rehabilitation/restorative care options are interventions that help a resident achieve maximum functional potential. These are services not provided by specialized therapy staff (e.g., occupational therapist, physical therapist). Figure 16 below describes the proportion of residents that were administered specific nursing rehabilitation/restorative care over the past seven days.

Dressing or grooming (4%) was the most commonly administered form of nursing rehabilitation/restorative care among long-term care residents, followed by transfers (4%) and walking (3%).

Figure 16: Type of Nursing Rehabilitation/Restorative Care Received by Long-Term Care Residents



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Hospital/Emergency Department/Physician Visits

Among all residents who had a quarterly assessment, the majority (77%) were not admitted to the hospital for an overnight stay in the past 90 days (Figure 17).

Approximately 11% of residents visited the emergency department but were not admitted to the hospital (Figure 18).

The majority of residents within the long-term care facility (78%) were seen by a physician at least once in the past 14 days (Figure 19).

Figure 17: Number of Times the Long-Term Care Resident was Admitted to Hospital with an Overnight Stay in the Past 90 Days

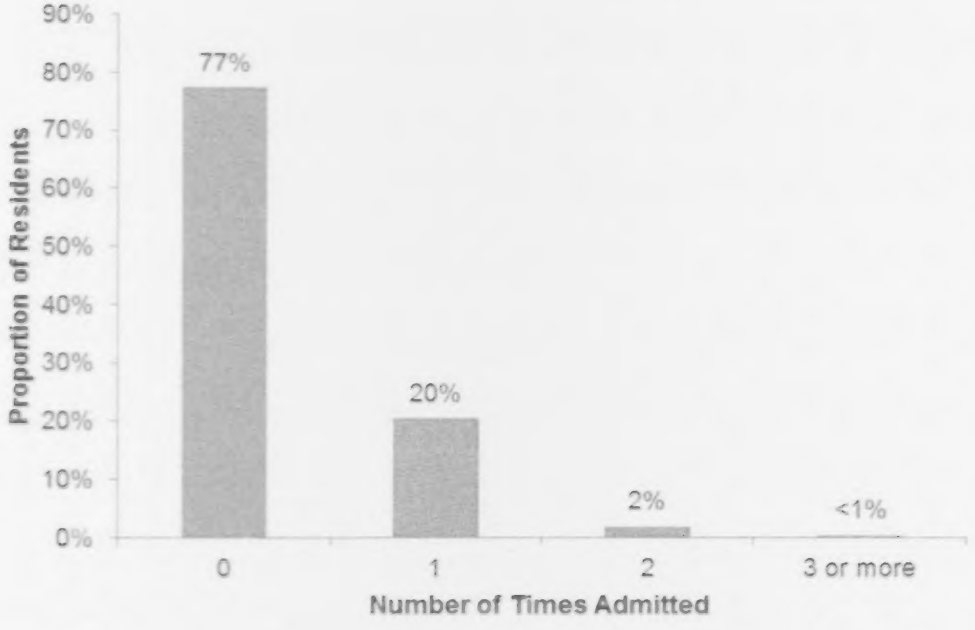

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Figure 18: Number of Times the Long-Term Care Resident Visited a Hospital Emergency Room but was not Admitted for an Overnight Stay in the Past 90 Days

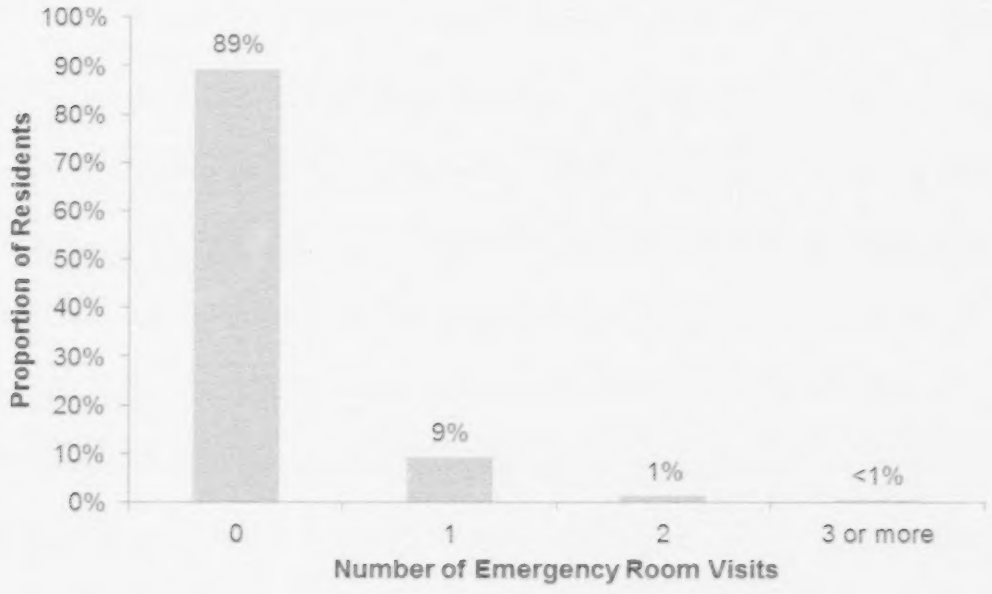
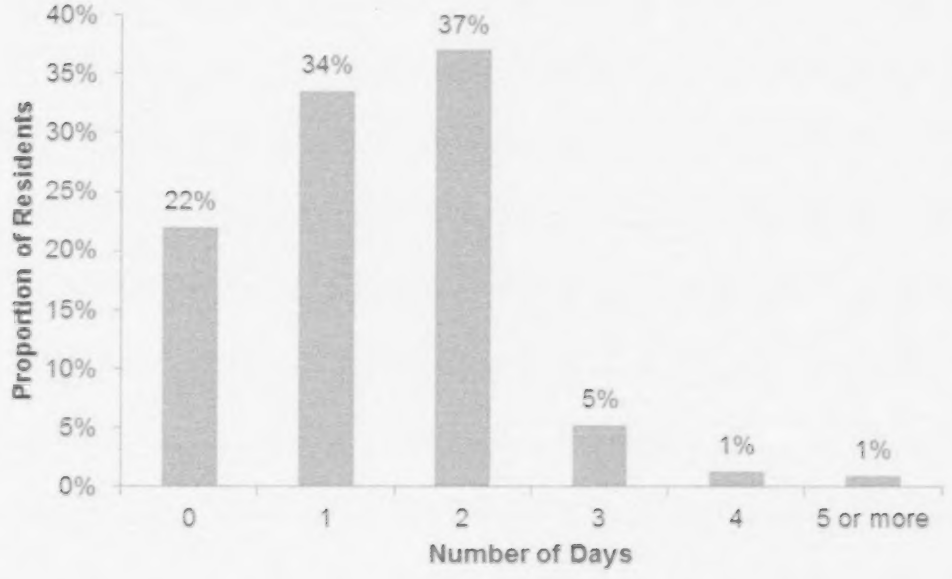


Figure 19: Number of Days During the Last 14 Day Period a Physician Has Examined the Long-Term Care Resident



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Intervention Programs for Mood, Behaviour and Cognitive Loss

Reorientation programs were the most commonly used intervention program for mood, behaviour, or cognitive loss with 28% of residents participating in this intervention. Reorientation programs are individual or group sessions that aim to reduce disorientation in confused residents.

Group therapy was the least commonly used intervention program with less than 1% of residents participating in this intervention *(observation period: last seven days prior to assessment)*.

Table 5: Intervention Programs for Mood, Behaviour and Cognitive Loss

Type of Intervention	Proportion of Residents
Reorientation	28%
Deliberate Resident-Specific Changes in the Environment	8%
Evaluation by a Licensed Mental Health Specialist	3%
Special Behaviour Symptom Evaluation Program	3%
Group Therapy	<1%
Did not participate in any of the above	67%

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For Further Information

The *2013/2014 Alberta Long-Term Care Resident Profile* was developed through the coordinated efforts of the Continuing Care Branch and the Health Analytics Branch at Alberta Health. The *Alberta Long-Term Care Resident Profile* is an ongoing project that will continue to produce this report on an annual basis. Each report will act as a cross-sectional profile, providing insight on the potential changes among long-term care residents in Alberta.

For questions regarding the methodology or development of the *Alberta Long-Term Care Resident Profile*, please contact the Continuing Care Branch at Alberta Health at 780-644-5499. Dial 310-0000 for toll-free access within Alberta.

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